Personal Fulfillment and Professional Excellence

Dorothy Reed Mendenhall, Pathologist and Children's Bureau Investigator

| Excerpted from Mendenhall, Dorothy Reed, *What Is Happening to Mothers and Babies in the District of Columbia?* Washington, DC: US Government Printing Office, 1928:15–17.

Dorothy Reed Mendenhall, courtesy of the Sophia Smith Collection, Smith College, Northampton, Mass.

HOW TO REDUCE THE DEATH RATES OF MOTHERS AND BABIES

The generally recommended methods of attack on high infant and maternal mortality rates presuppose an attempt to reach all the mothers in the country if those with special needs are to be helped. Those methods include the following factors:

A. Early and complete birth registration.

Births should be registered within 5 to 10 days after delivery. In cities there is no reason why births should not be registered within a week. Dr. Herman N. Bundesen, until recently health commissioner of Chicago, reports that 95% of the births in that city for 1925 were recorded within the 10-day limit required there. In Newark, N.J. 95% of the midwives are reporting births within 24 hours after delivery. The law there requires that births shall be reported within 5 days after delivery.

B. Safeguarding the mother and baby through prenatal care.

Maternity (prenatal) centers should be available for all women not able to be under the direct supervision of a private physician during their entire pregnancy. An educational campaign should be conducted to induce all pregnant women to place themselves under the care of their physicians or to go to a prenatal clinic early in pregnancy.

Prenatal centers should be established in connection with infant-hygiene centers, either publicly or privately supported or in connection with hospitals connected with medical schools. These prenatal centers should have a well-trained, experienced personnel, both medical and nursing, adequate in number. Physicians and nurses who have an interest in the maintenance of such a service should be engaged.

A physician's contact with the mother should be made as early in pregnancy as possible. A complete medical history should be recorded by the physician; and a physical examination given, including weight, pulse, temperature, blood pressure, urinalysis, and if possible a Wasserman test. The outline for the prenatal examination and the subsequent routine care prepared by the obstetrical advisory committee of the Children's Bureau (see Standards for Prenatal Care; an outline for the use of physicians, U.S. Children' Bureau Publication No. 153) or that used by the Maternity Center Association of New York or by other successful prenatal clinics should be followed.

Each prospective mother should make regular visits to the clinic for examination or advice every month in early pregnancy, and every two weeks or oftener in late pregnancy.

Follow-up visits to every mother should be made by the nurse. One home visit for every case is not enough, but it would be a great improvement over the present practice in the District. Women with certain symptoms may need many visits by the nurse to their homes.

Uniform and standard records should be kept up to date and in a form easily available. United States Children's Bureau Publication No. 153 gives a record blank that is widely used.

C. Safeguarding the mother and baby at the time of childbirth.

A hospital taking obstetrical cases only is desirable. If it is not available, hospitals taking such cases should have a properly organized and equipped department of obstetrics with provision for segregation of this type of

Dorothy Reed Mendenhall (1874–1964)

AS A GIFTED PATHOLOGY fellow working with William Henry Welch at the turn of the 20th century, Dorothy Reed Mendenhall discovered a blood-cell disorder that is characteristic of Hodgkin's disease. Later, her investigation of obstetrical practice inspired a landmark Children's Bureau study on the impact of unnecessary medical intervention in childbirth. Despite such achievements, Mendenhall was often criticized by male colleagues who were unsupportive of her attempts to balance her career in medicine with motherhood and family life. Some considered her "an able woman who had married and failed to use her expensive medical education."[1] Yet the story of her life and work reveals a great determination to pursue both professional and personal fulfillment and unwavering confidence to challenge medical orthodoxy in the interests of mothers and children.

Dorothy Reed was born in Columbus, Ohio, in 1874. Her father, who ran a shoe-manufacturing company, died when she was only 6 years old. He left enough wealth to allow for her upper-class schooling by a governess, as well as for several trips to Europe as she was growing up.

Reed graduated from Smith College in 1895, then spent a year at the Massachusetts Institute of Technology where she was the only woman in her chemistry class. After completing her preparatory courses in the sciences, she enrolled at Johns Hopkins Medical School in 1896. Because she already encountered frequent hostility from male students while at the Massachusetts Institute of Technology, she was undeterred by negative attitudes toward women physicians held by students and faculty at Hopkins and accomplished a great deal during her training. During her summer break in 1898, she and a fellow student became the first women to be employed at a US Naval hospital when they served as assistants in the operating room and bacteriology laboratories at the Brooklyn Navy Yard Hospital.[2] In 1900, she won a prestigious internship to study with William Osler, MD, and in 1901 she won a pathology fellowship with William Welch, MD. While working in the Hopkins laboratories, she discovered a blood-cell disorder that was linked to Hodgkin disease, now known as the Reed cell (or the Reed-Sternberg cell, after Dorothy Reed and Karl Sternberg, an Austrian pathologist).

After graduation she accepted an internship in pediatrics at Babies Hospital in New York City, becoming the first resident physician there in 1903. Her sister died in the summer of that year, leaving 3 children. Reed took on the responsibility of providing for their education. In 1906, she married Charles Elwood Mendenhall, and the couple moved to Madison, Wisconsin, where Charles served as professor of physics at the University of Wisconsin. A year later, Reed Mendenhall lost her first child shortly after birth because of poor obstetrical care. She went on to have 3 more children, and spent 8 years away from work. She developed a keen interest in child health, and began collecting epidemiological data.

When she returned to medicine, in 1914, she researched child and maternal health, and wrote bulletins for the University of Wisconsin's Department of Home Economics, the Wisconsin State Board of Health, and the US Department of Agriculture. In Madison, Wis, in 1915, she organized Wisconsin's first infant welfare clinic, with the help of a volunteer organization and the Visiting Nurse Association. She served as chairperson of the Association until 1936. Four more clinics were eventually established, and, in 1937, Madison was cited as the city with the lowest infant mortality rate in the United States.[2]

In 1917, the family moved to Washington, DC, and Mendenhall took a job at the Children's Bureau, participating in its national program to weigh and measure children aged younger than 6 years, from 1918 to 1919. She also surveyed war orphanages in France and Belgium, and studied nutrition among English children. In 1918, the Bureau printed her publication, *Milk: The Indispensable Food for Children.* At the end of the war, she moved back to Wisconsin, but continued to undertake fieldwork and research for the Bureau. She also wrote 6 chapters of *Child Care and Child Welfare: Outlines for Study,* published in 1921.

In 1926, she investigated infant and maternal mortality rates in Denmark and compared them with American statistics, concluding that the higher death rates in America were caused by unnecessary medical intervention. Mendenhall proposed that midwives be taught best obstetrical practices, following the Danish model. In 1929, the Children's Bureau published her analysis as *Midwifery in Denmark.* In 1928, the Bureau issued another of her reports, *What Is Happening to Mothers and Babies in the District of Columbia?,* excerpted here.

Mendenhall enjoyed a rich personal life and a vibrant career in public health. After the death of her husband in 1935, she traveled in Central America and Mexico, then settled in Chester, Conn, where she died in 1964. Despite pressure from colleagues in medicine who had little time for women physicians or issues of women's health, she devoted her career to the meticulous investigation of child and maternal health. ■

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patient from all others in the institution. Special facilities should be available for the immediate segregation and isolation of all cases of infection, temperature, or other conditions inimical to safety and welfare of the patients in this department. There should be absolute separation of nursing and resident medical staff from the other departments of the hospital. Complete and accurate records of all obstetrical patients should be kept and should be reviewed by the medical staff, with particular consideration of deaths, infections, complications and any other conditions that are not conducive to the best results.

D. Safeguarding the baby after birth.

1. A public-health nurse should make a visit to newly registered babies as soon as possible after registration. (In Newark the report of every new birth is referred to a nurse within a few hours.) At the first visit, if the mother wishes to avail herself of such instruction, the nurse should instruct her as to the value of breastfeeding and should refer her to the nearest infant-welfare center. Follow-up visits by the nurse should be made several times during an infant's first year of life, at regular intervals. The Infant Welfare Society nurses of Chicago make a visit every 30 days to the homes of babies registered at their centers. Under Doctor Bundesen's administration the infants under the care of a private physician or of an infant-welfare center were placed in a 90-day revisit group and other infants in a 30-day revisit group. These "revisits" followed the first visit of the nurse with the certificate of birth registration. The Appraisal Form for City Health Work says that the standard for field nursing service in infant care is 4000 visits per 1000 live births. Sufficient visits should be made to homes of all infants in a community, so that it will be impossible for a mother not under a physician's care to endanger the life or the health of her infant from lack of instruction she could receive from the visiting nurse or at an infant welfare center.

2. Child-health centers should be established to safeguard the infant and preschool child. There should be a sufficient number of these to meet the need of the community, located where the birth and infant mortality rates are highest and where the needs are greatest.

The personnel of a center should be paid; it should consist of—

1. A qualified physician who is in sympathy with public-health work, trained in pediatrics, and experienced in working with children. A physician should not be called upon to examine more than 30 children (infants or preschool children) at one two to three hour session.

2. A nurse and (in large centers) an assistant nurse and helper. (The helper may be untrained.) Public-health training and experience in nursing young children are fundamental requirements for the nurse in charge of a center, or of the head nurse in charge of the nursing personnel of a number of centers. The examination of children at these centers should conform to standards such as are outlined in Standards for Physicians Conducting Conferences in Child-Health Centers. (U.S. Children's Bureau Publication No. 154)

Uniform and standard records should be kept. The number of infants under 1 year of age attending the center and the number of children over 1 year should be recorded. The mortality of the infants attending the centers should be carefully recorded. The number of visits per child per center and the number of home visits per nurse per child should be large enough to insure proper supervision of health and habits of the child.

3. Breastfeeding campaigns. To bring about an increase in the extent of breastfeeding the following measures should be employed:

(a) The cooperation of a group of actively interested physicians.

(b) The sending of a birth-registration card within a few days after the birth of every child.

(c) Employment of an adequate number of properly trained nurses.

(d) An adequate amount of home visiting by these nurses, including a visit to each baby soon after birth, a visit during the second month, and a visit before the 10th month.

(e) Distribution of circulars explaining the value of breastfeeding.

All agencies working for the protection of maternity and infancy should correlate their activities closely to prevent duplication, to insure the same consistently high standard of work, and to increase the achievements for which all are striving. ■